

REMARKS

Claims 1-24 remain in the application, with claims 1, 4, 9, 12, 15, 17-19, and 24 having been amended hereby. The claims have been carefully reviewed with particular attention to the points raised in the Office Action. It is submitted that no new matter has been added and no new issues have been raised by the present amendment.

Attached hereto is a version with markings to show changes made to the claims by the current amendment.

Reconsideration is respectfully requested of the rejection of claims 1, 6, 9, 15, 21, and 24 under 35 U.S.C. § 102(b), as having been allegedly anticipated by U.S. Patent No. 5,132,992 (Yurt et al.).

Applicant has carefully considered the Examiner's comments and the cited reference and respectfully submits that claims 1, 6, 9, 15, 21, and 24 are patentably distinct over the cited reference for at least the following reasons.

The present invention relates to a data distribution system and method for distributing digital music data. The system includes a data transmitter installed at a data control center and a data receiver at a user's side. The data transmitter and the data receiver are connected via a communication network. The data transmitter receives a request from the data receiver via the network, retrieves requested data, divides the requested data into an outline part and a supplement part, and transfers the outline and supplement parts to the data receiver. The outline part is

transferred first, followed by transferal of the supplement part. The outline and supplement parts are recombined at the data receiver to restore the data.

Yurt et al., as understood by applicant, relates to an audio and video transmission and receiving system. Compressed and encoded audio and/or video information is sent over standard telephone, cable, or satellite broadcast channels to a receiver specified by a subscriber of the service. The transmission is preferably in less than real time, for subsequent playback and optional recording on standard audio and/or video tape.

The Examiner contends, inter alia, that Yurt et al. discloses the use of dividing means for dividing a desired program retrieved by retrieving means into an outline part for informing a user of an outline of the desired program and a supplement part recombinable with the outline part for restoring the desired program (see Office Action, p. 3, lns. 5-10). Applicant respectfully disagrees.

As understood by Applicant, the system of Yurt et al. allows a user to access a transmission system to request a transmission of audio and/or video material from a list of available items (see Yurt et al., col. 3, lns. 50-60). The transmission system includes source material library means containing a source material library for temporarily storing items prior to conversion and storage in at least one compressed data library (see id., col. 5, lns. 66-68; col., 6, lns. 1-7; Figs. 2a-2b). The items may include analog and digital audio and video information as well as physical objects such as books and records which require conversion to

a compatible media type before they can be converted, compressed, and stored in a compressed data library (see id.).

Prior to transmission to the user, the items are stored in the compressed data library, and are given a unique identification code by an identification encoder (see id., col. 6, lns. 35-47). This storage encoding also may involve logging program notes about the item and assigning a file address and/or a popularity code to the item (see id.).

The transmission system of Yurt et al., as understood by Applicant, also includes conversion means for placing the items from the source material library into a predetermined format as formatted data after the encoding is performed by the identification encoder as described above (see id., col. 6, lns. 55-68). When the encoded information is in digital form, a formatter sets correct bit rates and encodes the information into least significant bit (LSB) first pulse code modulated (PCM) data. (see id., col. 7, lns. 1-11). The formatter includes a digital audio formatter and a digital video formatter (see id.). From the conversion means, the formatted information is ordered by a time encoder included in ordering means (see id., col. 7, lns. 59-68; col. 8, lns. 1-23; Fig. 2a). The time encoder places blocks of the converted formatted information into a group of addressable blocks, and employs time encoding as an addressing scheme (see id.).

This time encoding allows realignment of the audio and video information in the compressed data formatting section after separate audio and video compression processing by a precompression processor and a compressor (see id.). The

converted formatted information is then in the form of a series of digital data bytes that represent frames of video data and samples of the audio data (see id.).

The Examiner contends that "[t]he formatter divides the desired items into part [sic] the audio part and the video part to be recombined at the user terminal" (see Office Action, p. 3, lns. 9-10).

It is respectfully submitted, however, that the compressed data formatting section (see Yurt et al., Fig. 2a, 117) within which the above-described alignment occurs is located within the transmission system, and the alignment is performed before the information is stored in the compressed data library (see id., Fig. 2a). Therefore, since the user accesses the information items from the compressed data library (see id., col. 16, lns. 45-52; Fig. 2b), the recombination alleged by the Examiner cannot occur at the user terminal.

In contrast, in the system of the present invention, the data transmitter at the server side receives a request from the receiver, retrieves requested data, divides the retrieved data into an outline part and a supplement part, and transfers the outline and supplement parts, in that order, to the data receiver, where the parts are recombined (see specification of the present application, p. 3, lns. 10-13, 19-20; p. 4, lns. 7-10; p. 7, lns. 2-5; p. 8, lns. 17-21; p. 9, lns. 1-15).

Furthermore, as understood by Applicant, in the system of Yurt et al. data stored in the compressed data library are

transferred in data block form and are buffered by the communications controller before being sent to the reception system via the communication channel (see Yurt et al., col. 16, lns. 45-52; Fig. 5). It is respectfully submitted that there is no disclosure or suggestion by Yurt et al. of the transmission of outline and supplement parts, in that order, to the data receiver, as recited in the present application (see specification of the present application, p. 3, lns. 10-13, 19-20; p. 4, lns. 7-10; p. 7, lns. 2-5; p. 8, lns. 17-21; p. 9, lns. 1-15).

Accordingly, for the above-stated reasons, it is respectfully submitted that independent claims 1, 9, 15, and 24, and the claims depending therefrom, are patentably distinct over Yurt et al.

Reconsideration is respectfully requested of the rejection of claims 2, 10, and 16 under 35 U.S.C. § 103(a), as being allegedly unpatentable over Yurt et al., in view of U.S. Patent No. 5,469,474 (Kitabatake).

Applicant has carefully considered the Examiner's comments and the cited references, and respectfully submits that claims 2, 10, and 16 are patentably distinct over the cited references for at least the following reasons.

Kitabatake, as understood by Applicant, relates to a method of allocating optimal quantization bit numbers to a plurality of frequency band signals into which an input signal is divided.

It is respectfully submitted that neither Yurt et al. nor Kitabatake, alone or in combination, disclose or suggest

dividing requested data into an outline part and a supplement part, transferring the outline and supplement parts in that order to the data receiver, and recombining the parts in the data receiver to restore the requested data, as recited in the present application.

Accordingly, for the above-stated reasons, it is respectfully submitted that claims 2, 10, and 16 are patentable over the cited references.

Reconsideration is respectfully requested of the rejection of claims 3, 11, and 18 under 35 U.S.C. § 103(a), as being unpatentable over Yurt et al., in view of U.S. Patent No. 5,734,657 (Kim).

Applicant has carefully considered the Examiner's comments and the cited references, and respectfully submits that claims 3, 11, and 18 are patentably distinct over the cited references for at least the following reasons.

Kim, as understood by Applicant, relates to an encoding method that utilizes masking characteristics of channels for bit allocation so as to improve sound quality when reproducing an audio signal, wherein when audio signals of at least two channels are encoded a number of bits of a channel where an MNR value of each divided band is more than a predetermined value are reserved and a number of bits corresponding to the number of remaining bits are additionally allocated to each divided band of another channel having an MNR value less than the predetermined value.

It is respectfully submitted that neither Yurt et al. nor Kim, alone or in combination, disclose or suggest dividing requested data into an outline part and a supplement part,

transferring the outline and supplement parts in that order to the data receiver, and recombining the parts in the data receiver to restore the requested data, as recited in the present application.

Accordingly, for the above-stated reasons, it is respectfully submitted that claims 3, 11, and 18 are patentable over the cited references.

Reconsideration is respectfully requested of the rejection of claims 4, 12, and 19 under 35 U.S.C. § 103(a), as being unpatentable over Yurt et al., in view of U.S. Patent No. 5,731,767 (Tsutsui et al.).

Applicant has carefully considered the Examiner's comments and the cited references, and respectfully submits that claims 4, 12, and 19 are patentably distinct over the cited references for at least the following reason.

Tsutsui et al., as understood by Applicant, relates to an encoding and decoding apparatus and method using transform processing to allow a waveform element of a corresponding block to interfere with waveform elements of blocks adjoining in both directions at the time of inverse transform processing to compose a waveform signal, whereby amplifying processing in encoding and corresponding correction processing in decoding can be performed without inconsistency between blocks. Occurrence of pre-echo is prevented by using spectrum transform processing of high encoding efficiency.

It is respectfully submitted that neither Yurt et al. nor Tsutsui et al., alone or in combination, disclose or suggest dividing requested data into an outline part and a supplement part, transferring the outline and supplement parts in that

order to the data receiver, and recombining the parts in the data receiver to restore the requested data, as recited in the present application.

Accordingly, for the above-stated reasons, it is respectfully submitted that claims 4, 12, and 19 are patentable over the cited references.

Reconsideration is respectfully requested of the rejection of claims 5, 13, and 20 under 35 U.S.C. § 103(a), as being unpatentable over Yurt et al., in view of U.S. Patent No. 5,895,124 (Tsuga et al.).

Applicant has carefully considered the Examiner's comments and the cited references, and respectfully submits that claims 5, 13, and 20 are patentably distinct over the cited references for at least the following reasons.

Tsuga et al., as understood by Applicant, relates to an optical disc storing a plurality of sets of audio data and a plurality of sets of sub-picture data that are interleaved with moving picture data for which the audio data and sub-picture data that are reproduced with moving picture data are dynamically changed.

It is respectfully submitted that neither Yurt et al. nor Tsuga et al., alone or in combination, disclose or suggest dividing requested data into an outline part and a supplement part, transferring the outline and supplement parts in that order to the data receiver, and recombining the parts in the data receiver to restore the requested data, as recited in the present application.

Accordingly, for the above-stated reasons, it is respectfully submitted that claims 5, 13, and 20 are

patentable over the cited references.

Reconsideration is respectfully requested of the rejection of claims 7, 8, 14, 22, and 23 under 35 U.S.C. § 103(a), as being unpatentable over Yurt et al., in view of U.S. Patent No. 5,592,511 (Schoen et al.).

Applicant has carefully considered the Examiner's comments and the cited references, and respectfully submits that claims 7, 8, 14, 22, and 23 are patentably distinct over the cited references for at least the following reasons.

Schoen et al., as understood by Applicant, relates to a system for creation of user-selected customized audio products that include a plurality of songs from different recording artists recorded on a single compact disc or digital audio tape cassette at record distributor locations utilizing a digitized, central database with production hardware at distributor sites. The system records costs of the digitized audio for billing purposes and produces descriptive material including contents, background information, and label graphics.

It is respectfully submitted that neither Yurt et al. nor Schoen et al., alone or in combination, disclose or suggest dividing requested data into an outline part and a supplement part, transferring the outline and supplement parts in that order to the data receiver, and recombining the parts in the data receiver to restore the requested data, as recited in the present application.

Accordingly, for the above-stated reason, it is respectfully submitted that claims 7, 8, 14, 22, and 23 are patentable over the cited references.

Reconsideration is respectfully requested of the rejection of claim 17 under 35 U.S.C. § 103(a), as being unpatentable over Yurt et al., in view of U.S. Patent No. 5,664,056 (Akagiri).

Applicant has carefully considered the Examiner's comments and the cited references, and respectfully submits that claim 17 is patentably distinct over the cited references for at least the following reasons.

Akagiri, as understood by Applicant, relates to an encoder apparatus and method for compressing a digital input signal derived from an analog signal to reduce the number of bits required to represent the analog signal with low quantizing noise. In the encoder the digital input signal derived from the analog signal is divided into frequency ranges. The digital signal in each of the frequency ranges is divided in time into blocks, the time duration of which may be adaptively varied. The blocks are orthogonally transformed into spectral coefficients that are grouped into critical bands. The total number of bits available for quantizing the spectral coefficients is allocated among the critical bands.

It is respectfully submitted that neither Yurt et al. nor Akagiri, alone or in combination, disclose or suggest dividing requested data into an outline part and a supplement part, transferring the outline and supplement parts in that order to the data receiver, and recombining the parts in the data receiver to restore the requested data, as recited in the present application.

Accordingly, for the above-stated reasons, it is respectfully submitted that claim 17 is patentable over the

cited references.

Should the Examiner disagree, it is respectfully requested that the Examiner specify where in the cited document there is a basis for such disagreement.

The Office is hereby authorized to charge any additional fees which may be required in connection with this Amendment and to credit any overpayment to Deposit Account No. 03-3125.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE CLAIMS

Claims 1, 4, 9, 12, 15, 17-19, and 24 have been amended
as follows:

--1. (Twice Amended) A data distribution system including an information service center and terminal equipment remote from the information service center and adapted for distributing a program selected at the terminal equipment from the information service center to the terminal equipment, the information service center comprising:

storage means for storing a plurality of programs;
retrieving means for retrieving a desired program selected at the terminal equipment from the plurality of programs stored in the storage means;

dividing means for dividing the desired program retrieved by the retrieving means into an outline part for informing a user of an outline of the desired program and into a supplement part recombinable with the outline part for restoring the desired program; and

[time-division] transmission means for [time-division transmission of] transmitting the outline part and the supplement part [divided by the dividing means] thereafter to the terminal equipment; and the terminal equipment comprising:

receiving means for receiving the outline part and the supplement part transmitted from the information service center;

recombining means for recombining the outline part and the supplement part received by the receiving means; and

reproducing means for reproducing [the desired program based on] the outline part [used] for monitoring.

--4. (Twice Amended) The data distribution system as set forth in claim 1, wherein:

the desired program includes audio data; and
the dividing means comprises frequency [band] component dividing means for dividing [a] frequency [band] components of the audio data into an even spectrum and an odd spectrum for providing one of the even spectrum and the odd spectrum as the outline part and [a remaining] an other spectrum as the supplement part.

--9. (Twice Amended) An information service center for distributing a program to terminal equipment, comprising:

storage means for storing a plurality of programs;
retrieving means for retrieving a desired program selected at the terminal equipment from the plurality of programs stored in the storage means; [and]
dividing means for dividing the desired program retrieved by the retrieving means into an outline part for informing a user of an outline of the desired program and into a supplement part recombinable with the outline part for restoring the desired program; and

transmission means for transmitting the outline part and the supplement part thereafter to the terminal equipment.

--12. (Twice Amended) The information service center as set forth in claim 9, wherein the desired program includes audio data; and the dividing means comprises:

frequency [band] component dividing means for dividing [a] frequency [band] components of the audio data into an even spectrum and an odd spectrum for providing one of the even spectrum and the odd spectrum as the outline part and [a remaining] an other spectrum as the supplement part.

--15. (Twice Amended) Terminal equipment for receiving a program transmitted from an information service center, comprising:

receiving means for receiving an outline part and a supplement part distributed sequentially from the information service center;

[first] recombining means for recombining the outline part and the supplement part received by the receiving means; and

reproducing means for reproducing [the program based on] the outline part for monitoring by a user.

--17. (Twice Amended) The terminal equipment as set forth in claim 15, further comprising:

converting means for converting frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signal[; and

second] , wherein said recombining means [for recombining converted] recombines signals from the converting means for

band composition to restore the program.

--18. (Twice Amended) The terminal equipment as set forth in claim 15, wherein:

the outline part and the supplement part distributed from the information service center respectively include a first output generated through addition of a plurality of channels and a second output generated through subtraction of the plurality of channels; and

the [first] recombining means adds and subtracts the outline part and the supplement part to restore the program.

--19. (Twice Amended) The terminal equipment as set forth in claim 15, wherein:

the program includes audio data;

the outline part and the supplement part distributed from the information service center each include an even spectrum and an odd spectrum resulting from division of [a] frequency [band] components of the audio data; and

the first recombining means provides the even spectrum and the odd spectrum alternately to [the outline part and the supplement part] restore the program.

--24. (Twice Amended) A method of distributing a program between an information service center and terminal equipment remote from the information service center, comprising the steps of:

dividing a desired program selected at the terminal equipment into an outline part for informing a user of an

outline of the desired program[,] and into a supplement part recombinable with the outline part for restoring the desired program;

transmitting [in a time-division manner an] the outline part and [a] the divided supplement part thereafter to the terminal equipment;

receiving the outline part and the supplement distributed from the information service center;

recombining [a] the received outline part and [a] the received supplement part; and

reproducing [the desired program based on] the outline part for monitoring by the user.--